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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/539,405	03/31/2000	Ioan V. Teodorescu	036560.6701	9485

24587 7590 02/04/2005

ALCATEL USA
INTELLECTUAL PROPERTY DEPARTMENT
3400 W. PLANO PARKWAY, MS LEGL2
PLANO, TX 75075

EXAMINER	
KADING, JOSHUA A	

ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/539,405	TEODORESCU, IOAN V.	
	Examiner	Art Unit	
	Joshua Kading	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 July 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3-5, 7-10, 12-20, and 22 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 11, and 12 of U.S. Patent No. 6,763,016 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because elements of the claimed invention of the instant application are obvious variants of the claimed invention of '016 that one of ordinary skill in the art would have easily recognized.

Claims 1, 3, 4, 5, 7, 8, and 9 are rejected over claims 1 and 2 of '016 and claims 10, 12-19, 20, and 22 are rejected over claims 11 and 12. Although claims 1, 2, 11, and 12 of '016 are directed to the transmission of a synchronization signal in "the opposite direction" as the signal of claims 1, 3-5, 7-10, 12-20, and 22 of the instant application (i.e. the synchronization signal originates in the timing generator and travels through the system whereas the feedback signal of the instant application travels through the

system to the timing generator), one of ordinary skill in the art would have easily recognized that if a signal can travel one way in a communication system, it must be able to travel in the opposite direction, i.e. the direction from which it came. This is the very nature of communication and thus it would have been obvious to one of ordinary skill in the art at the time of invention to send a signal (e.g. feedback) to the timing generator.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-5, 10, and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Katzman et al. (U.S. Patent 4,228,496).

Regarding claims 1 and 10, Katzman discloses, a system and method for "a plurality of bus control modules, each having a plurality of cards coupled thereto by a bus and operable to control the operation of the cards on the bus, and each further operable to receive feedback information from the cards coupled thereto and to generate a feedback signal based on the feedback information received (figure 2, elements 37 and 33 where the cards 33 on each bus are controlled by elements 37 and

receive/transmit data to and from the controllers as described in col. 18, lines 10-25 and col. 22, lines 12-21);

a lower level distribution module coupled to the bus control modules, the lower level distribution module operable to receive the feedback signal and to insert feedback information for the lower level distribution module into the feedback signal (figure 2, element 107); and

a timing generator coupled to the lower level distribution module, the timing generator operable to receive the feedback signal and to provide the feedback signal to a controller for response (figure 3, element 91 which is part of each controller in figure 2)."

Regarding claims 3 and 12, Katzman discloses the system of claim 1 and the method of claim 10. Katzman further discloses, "an intermediate level distribution module coupled to the lower level distribution module and to the timing generator, the intermediate level distribution module operable to receive the feedback signal and to insert feedback information for the intermediate level distribution module into the feedback signal (figure 2, element 105 and col. 22, lines 12-21 where the intermediate module receives data and inserts a corresponding piece of information)."

Regarding claims 4 and 13, Katzman discloses the system of claim 3 and the method of claim 12. Katzman further discloses, "the feedback signal comprising a plurality of frames, the intermediate level distribution module corresponding to a

specified frame, inserting the feedback information into the feedback signal comprising inserting the feedback information into the specified frame of the feedback signal (col. 22, lines 12-21)."

Regarding claims 5 and 14, Katzman discloses the system of claim 3 and the method of claim 12. Katzman further discloses, "an upper level distribution module coupled to the intermediate level distribution module and to the timing generator, the upper level distribution module operable to receive the feedback signal and to insert feedback information for the upper level distribution module into the feedback signal (figure 2, element 55)."

Claims 19, 20, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Diaz et al. (U.S. Patent 5,526,344).

Regarding claim 19, Diaz discloses, "a method for providing a feedback signal in a telecommunications network, comprising: providing a feedback signal comprising a plurality of frames (figure 5b which is similar to the plurality of frames as described in applicant's specification, figure 4A and as read in Diaz, col. 13, lines 52-col. 14, lines 1-16); assigning each of a plurality of modules to a specified frame of the feedback signal (col. 13, lines 52-col. 14, lines 1-16); and modifying the specified frame with the assigned module (col. 13, lines 52-col. 14, lines 1-16)."

Regarding claim 20, Diaz discloses, "modifying the specified frame with the assigned module comprising inserting feedback information for the assigned module into the specified frame (col. 13, lines 52-col. 14, lines 1-16)."

Regarding claim 22, Diaz discloses, "the plurality of modules comprising bus control modules and distribution modules (figure 3, elements 52, 54, 70, and 72)."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katzman et al.

Regarding claim 9, Katzman discloses the system of claim 1. However, Katzman does not explicitly disclose, "the feedback signal comprising an alarm signal." Although Katzman does not explicitly disclose the feedback signal is an alarm signal, it would have been obvious to one with ordinary skill in the art at the time of invention to include an alarm signal as a feedback signal as a matter of design choice. A motivation for using an alarm signal, as with any other type of feedback signal, is to get a accurate, current representation of a system and its state.

Claims 6-8, 11, and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katzman et al. in view of Diaz et al.

Regarding claims 6 and 15, Katzman discloses the system of claim 5 and the method of claim 14. However, Katzman lacks what Diaz discloses, "the feedback signal comprising a plurality of frames, the upper level distribution module corresponding to a specified frame, inserting the feedback information into the feedback signal comprising inserting the feedback information into the specified frame of the feedback signal (figure 5b which is similar to the plurality of frames as described in applicant's specification, figure 4A and as read in Diaz, col. 13, lines 52-col. 14, lines 1-16 where each module receives its own "frame" by the nature of the time division access bus scheme)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the plurality of frames and insertion of feedback information into a specific frame for the purpose of performing certain function such as re-allocating data to a different mapping. The motivation for having such a feature is to allow the mapping to occur without the disruption of other traffic (Diaz, col. 14, lines 13-16).

Regarding claims 7 and 17, Katzman discloses the system of claim 1 and the method of claim 10. However, Katzman lacks what Diaz discloses, "the feedback signal comprising a plurality of frames, each bus control module corresponding to a specified frame, generating the feedback signal with the bus control modules comprising

generating the specified frame of the feedback signal at the corresponding bus control module (col. 13, lines 52-col. 14, lines 1-16 where each module receives its own "frame" by the nature of the time division access bus scheme)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the plurality of frames and insertion of feedback information into a specific frame for the purpose of performing certain function such as re-allocating data to a different mapping. The motivation for having such a feature is to allow the mapping to occur without the disruption of other traffic (Diaz, col. 14, lines 13-16).

Regarding claims 8 and 18, Katzman discloses the system of claim 1 and the method of claim 10. However, Katzman lacks what Diaz discloses, "the feedback signal comprising a plurality of frames, the lower level distribution module corresponding to a specified frame, inserting the feedback information into the feedback signal comprising inserting the feedback information into the specified frame of the feedback signal (col. 13, lines 52-col. 14, lines 1-16 where each module receives its own "frame" by the nature of the time division access bus scheme)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the plurality of frames and insertion of feedback information into a specific frame for the purpose of performing certain function such as re-allocating data to a different mapping. The motivation for having such a feature is to allow the mapping to occur without the disruption of other traffic (Diaz, col. 14, lines 13-16).

Regarding claim 11, Katzman discloses the method of claim 10. However, Katzman lacks what Diaz discloses, "responding to the feedback signal with the controller (col. 11, lines 54-66 where the feedback is returned to the controller and it is assumed that the control continually monitors and adjusts the timing of the system and therefore will respond to the feedback)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the responding to feedback for the purpose of adjusting system parameters (such as timing) in response to the current conditions of the system as in any control system with feedback. The motivation for doing so is to have an active approach in monitoring and solving system problems.

Regarding claim 16, Katzman discloses the method of claim 14. However, Katzman lacks what Diaz discloses, "providing the feedback signal from the upper level distribution module to the controller (col. 13, lines 52-col. 14, lines 1-16 where each module receives its own "frame" by the nature of the time division access bus scheme and the path of the feedback traverses each module)." It would have been obvious to one with ordinary skill in the art at the time of invention to provide the feedback for the purpose of adjusting system parameters (such as timing) in response to the current conditions of the system as in any control system with feedback. The motivation for doing so is to have an active approach in monitoring and solving system problems.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Diaz et al. in view of Katzman et al.

Regarding claim 21, Diaz discloses the method of claim 19 and "...responding to the modified feedback signal with the timing generator (col. 13, lines 52-60)." However, Diaz lacks what Katzman discloses, "providing the modified feedback signal to a timing generator (figures 2 and 3 where it is shown that a timing generator is coupled to the controller and thus signals to the controller will be transmitted to the timing generator as well)..." It would have been obvious to one with ordinary skill in the art at the time of invention to include providing feedback to a timing generator for the purpose of adjusting system parameters (such as timing) in response to the current conditions of the system as in any control system with feedback. The motivation for doing so is to have an active approach in monitoring and solving system problems.

Response to Arguments

Applicant's arguments with respect to claims 1 and 3-22 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (571) 272-3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joshua Kading
Examiner
Art Unit 2661

January 31, 2005

BOB PHUNKULH
PRIMARY EXAMINER